

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. – 5. (Cancelled)

6. (Currently Amended) A system for treating a vessel occlusion comprising:
a sheath, having a sheath body, said sheath body having a proximal end and having a distal end;
a lumen extending through said sheath body from said proximal end to said distal end;
a catheter having a catheter body having a proximal end and a distal end terminating in distal tip;
an energy source coupled to said distal tip;
a magnetically active element located proximate said distal tip of said catheter body, wherein the magnetically active element is made of a material that is attracted to a magnet.

7. (Currently Amended) A system for treating a vessel occlusion comprising:
a sheath, having a sheath body, said sheath body having a proximal end and having a distal end;
a lumen extending through said sheath body from said proximal end to said distal end;
a catheter having a catheter body having a proximal end and a distal end terminating in a distal tip;
an energy source coupled to said distal tip for delivering therapeutic energy to a vessel occlusion;
a magnetically active element forming a portion of said distal tip of said sheath body, wherein the magnetically active element is made of a material that is attracted to a magnet.

8. (Previously Presented) The system of claim 6 wherein the catheter further includes a first metallic element located proximate said distal tip adapted for coupling to a remote radio frequency energy source whereby RF energy coupled to said metallic element heats said metallic element.

9. (Previously Presented) The system of claim 8 wherein said metallic element forms one pole of a monopolar energy distribution system.

10. (Previously Presented) The system of claim 9 wherein the catheter further comprises a second metallic element proximate said distal tip forming a pole of a bipolar energy distribution system.

11. (Previously Presented) The system of claim 6 wherein the catheter further includes a thermally conductive element located proximate said distal tip adapted for coupling to a remote optical laser energy source whereby optical energy coupled to said thermally conductive element heats said thermally conductive element.

12. (Previously Presented) The system of claim 11 wherein said thermally conductive element is metallic.

13. (Previously Presented) The system of claim 6 wherein the catheter further includes an ultrasonic waveguide element located proximate said distal tip adapted for coupling to a remote ultrasonic frequency energy source.

14. (Previously Presented) The system of claim 6 wherein the catheter further includes a resistance heating element located proximate said distal tip adapted for coupling to a remote electrical energy source.

15. (Currently Amended) The system of claim 14 wherein the catheter further includes a resistance heating element located proximate said distal tip adapted for coupling to a remote AC ~~[[elect5rical]]~~ electrical energy source.

16. (Previously Presented) The system of claim 14 wherein the catheter further includes a resistance heating element located proximate said distal tip adapted for coupling to a remote DC electrical energy source.

17. (Previously Presented) The system of claim 6 wherein the catheter further includes a fluid directing element located proximate said distal tip adapted for coupling to a remote hydraulic energy source, whereby fluid coupled to said device extracts occlusive material from locations near the distal tip.

18. (Previously Presented) The system of claim 6 wherein the catheter further includes a lumen extending from the proximal end to the distal end, and a laser imaging device located in said lumen for observing an occlusion.

19. (Previously Presented) The system of claim 6 wherein the catheter further includes a lumen extending from the proximal end to the distal end, and an ultrasonic imaging device located in said lumen for observing an occlusion.

20. - 26. (Cancelled)

27. (New) The system of claim 6, further comprising an external magnet that applies a magnetic field that orients the distal tip of the catheter, such that the catheter tip may be positioned by advancing the catheter in the direction determined by the magnetic orientation of the catheter tip.

28. (New) The system of claim 7, further comprising an external magnet that applies a magnetic field that orients the distal tip of the sheath, such that the sheath tip may be positioned by advancing the sheath in the direction determined by the magnetic orientation of the sheath tip.

29. (New) The system of claim 14 wherein the distal tip is electrically isolated from but in thermal contact with the resistance heating element.

30. (New) The system of claim 7 wherein the catheter further includes a resistance heating element adapted for connection to a remote electrical energy source, wherein the distal tip is electrically isolated from but in thermal contact with the resistance heating element.